Amendments to the Claims

Please amend claims 7-31 as follows:

1. (Original) A method for treating a malignancy in a subject, comprising administering a pharmaceutically effective amount of a therapeutic agent to the subject, said therapeutic agent comprising an oligosaccharide, wherein said oligosaccharide is heparin or heparan-sulfate derived.

2. (Original) The method of claim 1, wherein said oligosaccharide is at least one of carboxylated and sulfated.

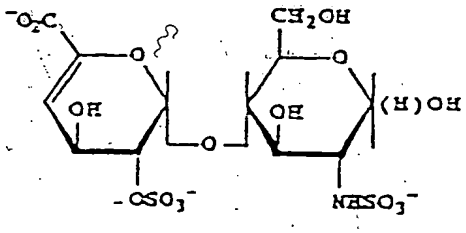
3. (Original) The method of claim 2, wherein said oligosaccharide is a glucosamine derivative and pharmaceutically acceptable salts thereof.

4. (Original) The method of claim 3, wherein said derivative is sulfated.

5. (Original) The method of claim 4, wherein said oligosaccharide is an N-sulfated-4-deoxy-4-en-iduronoglucosamine having at least one other sulfate group and pharmaceutically acceptable salts thereof.

6. (Original) The method of claim 4, wherein said oligosaccharide is an N-acetylated-4-deoxy-4-en-iduronoglucosamine having at least two sulfate groups and pharmaceutically acceptable salts thereof.

7. (Original) The method of claim 4, wherein said oligosaccharide is a disaccharide of formula (I) or its pharmaceutically acceptable salt:



(I)

in which X_1 is hydrogen or sulfate; X_2 is hydrogen or sulfate; and X_3 is sulfate or acetyl, provided that if X_3 is sulfate, then at least one of X_1 or X_2 is sulfate and if X_3 is acetyl, then both X_1 and X_2 are sulfates.

~~7~~8. (Currently Amended) The method of claim 4, wherein said oligosaccharide is an N-sulfated-4-deoxy-4-en-glucuronoglucosamine having at least one other sulfate group or a pharmaceutically acceptable salt thereof.

~~8~~9. (Currently Amended) The method of claim 4, wherein said oligosaccharide is an N-acetylated-4-deoxy-4-en-glucuronoglucosamine having at least two other sulfate groups or a pharmaceutically acceptable salt thereof.

~~9~~10. (Currently Amended) The method of claim 1, wherein said oligosaccharide is a sulfated disaccharide.

~~10~~11. (Currently Amended) The method of claim 1, wherein said oligosaccharide comprises at least one of DS Po912, DS 1145, DS 1020, DS 8767, DS Po821, DS 9267, DS 9517 and DS 0895.

~~11~~12. (Currently Amended) The method of claim ~~10~~11, wherein said oligosaccharide comprises DS Po912.

~~12~~13. (Currently Amended) The method of claim ~~10~~11, wherein said oligosaccharide is DS 1145.

~~13~~14. (Currently Amended) The method of claim 1, wherein the malignancy is a metastatic tumor.

~~14~~15. (Currently Amended) The method of claim ~~13~~14, wherein said metastatic tumor is selected from the group consisting of breast cancer, lung cancer, bone cancer, bladder cancer, rhabdomyosarcoma, angiosarcoma, adenocarcinoma, prostate cancer, colon cancer, squamos cell carcinoma of the

cervix, ovarian cancer, malignant fibrous histiocytoma, skin cancer, leiomyosarcoma, astrocytoma, glioma and heptocellular carcinoma.

~~15~~16. (Currently Amended) The method of claim ~~14~~15, wherein the malignancy is lung cancer.

~~16~~17. (Currently Amended) The method of claim 1, wherein said oligosaccharide is administered in an amount in a range of from about 1 to about_1000 micrograms of oligosaccharide per Kg of subject, weight per weight.

~~17~~18. (Currently Amended) A method for treating a metastatic cancer in a subject, comprising administering a pharmaceutically effective amount of a therapeutic agent to the subject, said therapeutic agent comprising an oligosaccharide, wherein said oligosaccharide is at least one of carboxylated and sulfated.

~~18~~19. (Currently Amended) The method of claim ~~17~~18, wherein said oligosaccharide is a glucosamine derivative and pharmaceutically acceptable salts thereof.

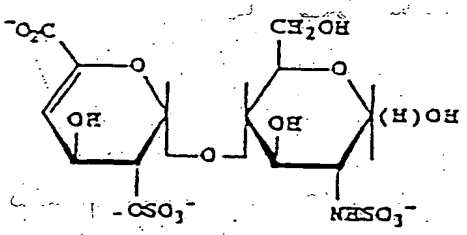
~~19~~20. (Currently Amended) The method of claim ~~18~~19, wherein said derivative is sulfated.

~~20~~21. (Currently Amended) The method of claim ~~19~~20, wherein said oligosaccharide is a sulfated disaccharide.

~~21~~22. (Currently Amended) The method of claim ~~20~~21, wherein said oligosaccharide is an N-sulfated-4-deoxy-4-en-iduronoglucosamine having at least one other sulfate group and pharmaceutically acceptable salts thereof.

~~22~~23. (Currently Amended) The method of claim ~~20~~21, wherein said oligosaccharide is an N-acetylated-4-deoxy-4-en-iduronoglucosamine having at least two sulfate groups and pharmaceutically acceptable salts thereof.

~~23~~24. (Currently Amended) The method of claim ~~20~~21, wherein said oligosaccharide is a disaccharide of formula (I) or its pharmaceutically acceptable salt:



(I)

in which X_1 is hydrogen or sulfate; X_2 is hydrogen or sulfate; and X_3 is sulfate or acetyl, provided that if X_3 is sulfate, then at least one of X_1 or X_2 is sulfate and if X_3 is acetyl, then both X_1 and X_2 are sulfates.

~~24~~25. (Currently Amended) The method of claim ~~20~~21, wherein said oligosaccharide is an N-sulfated-4-deoxy-4-en-glucuronoglucosamine having at least one other sulfate group or a pharmaceutically acceptable salt thereof.

~~25~~26. (Currently Amended) The method of claim ~~20~~21, wherein said oligosaccharide is an N-acetylated-4-deoxy-4-en-glucuronoglucosamine having at least two other sulfate groups or a pharmaceutically acceptable salt thereof.

~~26~~27. (Currently Amended) The method of claim ~~17~~18, wherein said oligosaccharide comprises at least one of DS Po912, DS 1145, DS 1020, DS 8767, DS Po821, DS 9267, DS 9517 and DS 0895.

~~27~~28. (Currently Amended) The method of claim ~~26~~27, wherein said oligosaccharide comprises DS Po912.

~~28~~29. (Currently Amended) The method of claim ~~26~~27, wherein said oligosaccharide is DS 1145.

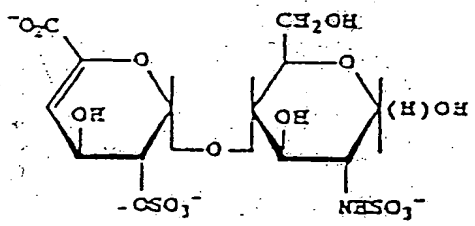
~~29~~30. (Currently Amended) The method of claim ~~17~~18, wherein said oligosaccharide alters localization of tumor cells to treat the metastatic cancer.

~~30~~31. (Currently Amended) The method of claim ~~17~~18, wherein said oligosaccharide alters homing activity of tumor cells to treat the metastatic cancer.

~~31~~32. (Currently Amended) The method of claim ~~17~~18, wherein said oligosaccharide interferes with the CXCR4 7TM-GPCR signaling pathway.

Response to Election Requirement

In response to the election requirement of the Examiner, Applicant has chosen to elect a single oligosaccharide species, DS Po912, chemically known as α-4-déoxy-$_L$-threohex-4-enopyranosyluronic-acid-2-sulfate-[1→4]-D-glucosamine-sulfate.



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This election is made with traverse because Applicant feels that all of the claimed oligosaccharides are sufficiently related according to an inventive concept to be considered with a single search.

Applicant believes that Claims 1-5, 7, 8 (previously the second claim 7), 10-12 (previously claims 9-11), 14-22 (previously claims 13-21), 24-25 (previously claims 23-24), 27-28 (previously claims 26-27), and 30-32 (previously claims 29-31) read on the elected species.

The Examiner stated that the claims originally numbered 1-10, 13-26 and 29-31 are generic. However, Applicant feels that according to the above election the claims originally numbered 6, 8, 22 and 25 (now numbered 6, 9, 23 and 26) are not generic.

Applicants reserve the right to file, at a later date, additional divisional applications claiming priority from the present application which are directed to any one or more of the non-elected species of oligosaccharide.

Respectfully submitted,

Dr. D'vorah Graeser
Registration No. 40,000

Date: February 9, 2004